

## REMARKS

Claims 1-29 are pending. Claims 1 and 3-29 have been rejected.

Claim 1 has been amended. Support for the amendment may be found throughout the specification as a whole, for example on page 4, lines 12-15. Further, a laminate inherently exhibits adhesion between its adjacent layers, as evidenced by the accompanying pages from "McGraw Hill Dictionary of Scientific and Technical Terms" and volume 8 of "Encyclopedia of Polymer Science and Engineering."

### Rejection Under 102(b) over Welhart et al.

Claims 1 and 5-8 have been rejected as anticipated by the Welhart patent, U.S. Patent 3,810,815. Applicant respectfully traverses the rejection.

Applicant has made explicit the inherent adhesion of adjacent laminate layers. Further, Applicant has defined a lag time between the formation of the laminate and the annealing step.

The Welhart method has a single step of placing separately cast sheets of poly(methyl methacrylate) and polycarbonate, which appear to not be adhered in any way, next to one another and then laminating those sheets together with heat and pressure. Column 3, lines 5-10.

Even if the Welhart patent arguendo discloses a step of forming a laminate, no further step of annealing is disclosed. In addition, no lag time between forming the laminate and the [nonexistent] annealing is disclosed.

The Examiner stated that the Welhart patent taught a method for improving adhesion. Applicant point out that there is no "improving" step, as prior to the

consolidation there was no adhesion at all. The abstract that the Examiner references for this alleged teaching of improving adhesion merely describes bonding in the first instance. The abstract's alleged step of forming is laminate appears to be by "diffusion bonding . . . in the presence of heat and pressure." Col. 1, lines 11-14. The "annealing" step allegedly in column 4, line 65 through column 5, line 11 appears to be the very same forming of the laminate with heat and pressure. It appears to the undersigned to be all the same step of forming the laminate itself with heat and pressure. See column 5, lines 2-3 ("the acrylic sheets 6 and 8 are diffusion bonded to the polycarbonate sheet 4 in the formation of the transparent laminate 2" (emphasis added)).

The Examiner's argument that the pressure alone forms a laminate is pure speculation and contrary to the explicit teachings of the reference in the abstract and in the passage in columns 4 and 5 that the laminate is formed in the presence of both heat and pressure. See, e.g., column 4, line 75 to column 5, line 4. The Examiner's attempt to read separate steps of forming and annealing into these passages are simply refuted by the Welhart patent's own characterization of what is happening.

The Welhart patent lacks description of any annealing step or of any lag time between laminate formation and annealing step.

For these reasons, Applicant submits that the Welhart patent does not anticipate the present invention. Applicant respectfully requests withdrawal of the rejection and reconsideration and allowance of the claims.

Rejection Under 103(a) Over Welhart et al. in View of Bonk et al.

Claims 4 and 9-29 have been rejected as unpatentable over the Welhart patent, U.S. Patent 3,810,815, in view of the Bonk reference, U.S. Patent No. 6,082,025. Applicant respectfully traverses the rejection.

The Examiner refers to "Blonk et al." This appears to be reference to the Bonk patent.

Neither the Welhart patent nor the Bonk patent describes any kind of annealing step or any kind of lag time between a step of laminate formation and an annealing step.

Moreover, the proposed substitution of materials to make the Welhart aircraft windows and canopies elastic is nothing short of preposterous. There is no suggestion to make the windows and canopies flexible. What would happen when the pressure outside the aircraft was reduced at higher altitudes? The Bonk materials could hardly be said to have the high strength of polycarbonate or acrylic sheets. Additionally, there is no teaching or suggestion in either reference that the Bonk laminates do have the high strengths of polycarbonate and acrylic sheets, and lack of citation thereto by the Examiner.

A person in the aerospace industry would not be motivated to make airplane windows or canopies flexible. The Examiner's argument is fanciful.

With regard to claim 9, neither cited patent suggests annealing at a temperature at least about 80°C above a thermal transition temperature of said at least one polymeric component of at least one of the layers.

With regard to claim 10, neither cited patent suggests blow molding before an annealing step.

With regard to claims 11-15, neither cited patent suggests a particular interval of time between blow molding and a subsequent annealing step.

With regard to claims 16 and 17, neither reference suggests annealing at any particular temperature.

With regard to claim 26, neither reference suggests a particular glass transition temperature of a polymeric component.

For all of these reasons, the claims are patentable over the cited Welhart and Bonk patents. Reconsideration and allowance of the claims are respectfully requested.

Rejection Under 103(a) Over Welhart et al. in View of Wang et al.

Claim 3 has been rejected as unpatentable over the Welhart patent, U.S. Patent 3,810,815, in view of the Wang patent, U.S. Patent No. 6,124,007. Applicant respectfully traverses the rejection.

There is no indication in either reference that the angioplasty balloon of Welhart would make suitable airplane windows or canopies. The requirements of angioplasty balloons and materials for aircraft differ somewhat. The mere existence of materials suitable for angioplasty balloons is not motivation to use those materials in aircraft. Neither does a claim of improved mechanical properties with respect to the requirements of angioplasty suggest that the "improved" materials would now be

suitable for all uses. [After all, it's the rare patent that *doesn't* claim its material has improved properties of some sort.]

Moreover, neither reference provides a teaching of annealing a laminate after a lag time. Reconsideration and allowance of the claim are respectfully requested.

Conclusion

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the rejections of the final Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. The Examiner is invited to telephone the undersigned if it would be helpful for resolving any issue or would expedite prosecution.

Respectfully submitted,

  
Anna M. Budde  
Anna M. Budde  
Registration No. 35,085

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Harness, Dickey & Pierce, P.L.C.  
P.O. Box 828  
Bloomfield Hills, Michigan 48303  
(248) 641-1600